

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-034325

(43)Date of publication of application : 08.02.1994

(51)Int.Cl.

G01B 11/02

(21)Application number : 04-190602

(71)Applicant : HITACHI LTD

(22)Date of filing : 17.07.1992

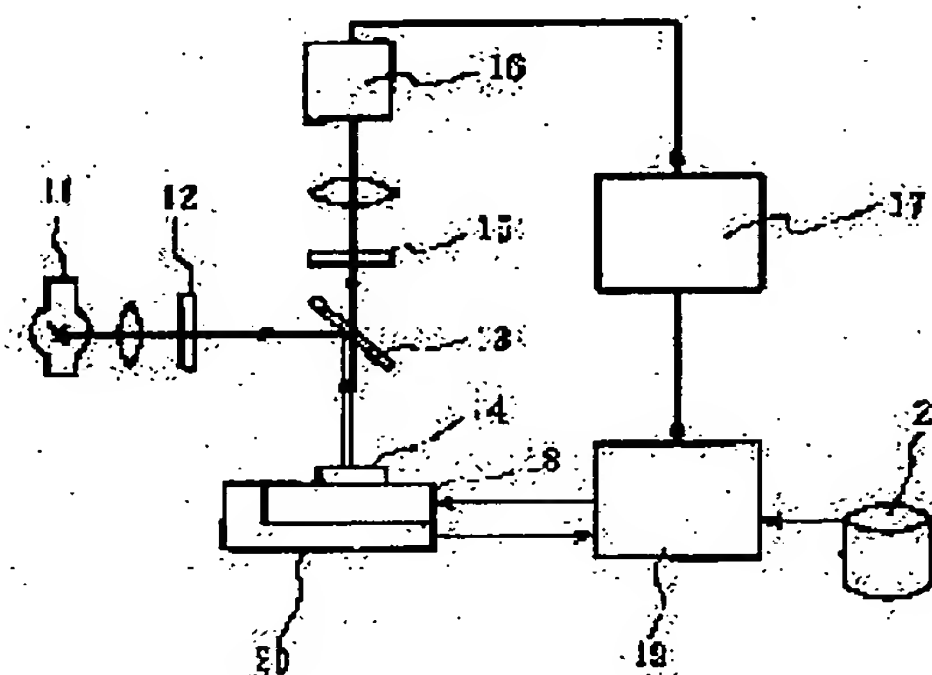
(72)Inventor : YAMAMURA HISAE
NINOMIYA TAKANORI

(54) SIZE MEASURING METHOD AND APPARATUS OF CIRCUIT SUBSTRATE PATTERN

(57)Abstract:

PURPOSE: To measure the size of a circuit substrate pattern automatically with high speed and high precision by extracting a measurement object part in a constant order and standard by image processing and computing the size.

CONSTITUTION: Illuminating light of a light source 11 illuminates a circuit substrate 14 to be measured through an optical filter 12 and a semi-transparent type mirror 13. A TV camera 16 shoots the reflected light of the substrate 14 through the mirror 13 and an optical filter 15, the detected signals are converted into digital signals and memorized as gradation data once in a memory in an image processing apparatus 17. The apparatus 17 computes the position of the measurement object part by image processing. The substrate 14 is fixed on an Xy stage 18 and a controlling apparatus 19 controls the whole of the apparatus and while shifting the stage, the apparatus 19 makes the apparatus 17 detect and process images, and the size of each measurement object part of the substrate 14 is computed, based on the position computed from each image and the position of the stage 18 computed by a stage position measuring apparatus 20.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office